IN THE CLAIMS:

Please cancel claims 1-11 without prejudice to or disclaimer of the subject matter recited therein.

Please add new claims 15-24 as follows:

LISTING OF CURRENT CLAIMS

1-11. (Canceled)

12. (Original) A bulk acoustic wave multiplexer controlled by micro-electro-mechanical switches, it comprises:

an upper substrate;

micro-electro-mechanical switches and driving circuits formed on the upper substrate;

a lower substrate;

wave-filtering units and connecting circuits formed on the lower substrate;

wherein, the upper and lower substrates are connected together to form a bulk acoustic wave multiplexer controlled by micro-electro-mechanical switches.

13. (Original) The bulk acoustic wave multiplexer as claimed in claim 12, wherein the upper and lower substrates are connected by flip-chip or CSP (chip scale package).

14. (Original) The bulk acoustic wave multiplexer as claimed in claim 13, wherein the driving circuits for driving the micro-electro-mechanical switches are CMOS circuits.

15. (New) A bulk acoustic wave filter controlled by micro-electro-mechanical switches comprising:

a) a substrate;

b) at least one wave filtering device connected to the substrate, the wave filtering device having an input terminal and an output terminal, the input terminal and the output terminal being at opposite ends of the wave filtering device; and

c) at least one micro-electro-mechanical switch releasably engaging the wave filtering device, such that the bulk acoustic wave filter is switched off when the at least one micro-electro-mechanical switch is in contact with the wave filtering device and switched on when the at least one micro-electro-mechanical switch is separated from the wave filtering device,

wherein the at least one wave filtering device and the at least one micro-electro-mechanical switch are connected to a first side of the substrate opposite a cavity on a second side of the substrate, the at least one micro-electro-mechanical switch controls the acoustic wave impedance generated by the bulk acoustic wave filter.

16. (New) The bulk acoustic wave filter controlled by micro-electro-mechanical switches according to Claim 15, wherein the at least one micro-electro-mechanical switch being separated from the wave filtering device a distance less than 1 μm when the bulk acoustic wave filter is switched on.

17. (New) The bulk acoustic wave filter controlled by micro-electro-mechanical switches according to Claim 15, wherein the at least one micro-electro-mechanical switch is driven by an actuating method selected from the group consisting of electrostatic driving, thermal-electrical driving, and piezoelectrical driving.

18. (New) The bulk acoustic wave filter controlled by micro-electro-mechanical switches according to Claim 15, further comprising:

a) an antenna;

b) an antenna terminal output/input port connected to the antenna;

c) a plurality of input ports;

d) at least one wave filtering device being a plurality of wave filtering devices; and

e) the at least one micro-electro-mechanical switch being a plurality of micro-electro-mechanical switches releasably engaging the plurality of input ports of the plurality of wave filtering devices and the antenna terminal output/input port.

19. (New) The bulk acoustic wave filter controlled by micro-electro-mechanical switches according to Claim 18, wherein the plurality of micro-electro-mechanical switches control when signals from the antenna are transmitted from the antenna terminal output/input port to the plurality of input ports.

20. (New) The bulk acoustic wave filter controlled by micro-electro-mechanical switches according to Claim 18, wherein the plurality of micro-electro-mechanical switches control when signals from the plurality of input ports are transmitted to the antenna terminal output/input port to be transmitted by the antenna.

21. (New) The bulk acoustic wave filter controlled by micro-electro-mechanical switches according to Claim 18, further comprising:

a) an input/output port;

b) a plurality of output ports;

c) the plurality of micro-electro-mechanical switches being four micro-electro-mechanical switches; and

d) the plurality of wave filtering devices being four wave filtering devices releasably engaging the input/output port and the plurality of output ports.

22. (New) The bulk acoustic wave filter controlled by micro-electro-mechanical switches according to Claim 21, wherein signals received by the input/out port are controlled by the plurality of micro-electro-mechanical switches and filtered by the wave filtering devices before being output through the output ports.

23. (New) The bulk acoustic wave filter controlled by micro-electro-mechanical switches according to Claim 21, wherein the wave filtering devices are different channels with the same frequency.

24. (New) The bulk acoustic wave filter controlled by micro-electro-mechanical switches according to Claim 21, wherein the wave filtering devices are different channels with the different frequencies.